



SHELL OIL COMPANY

P. O. BOX 262
WOOD RIVER, ILLINOIS 62095

October 25, 1979

Subject: Shell Oil Company vs.
Illinois Environmental Protection Agency
PCB 79-166

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Illinois Pollution Control Board
309 West Washington Street, Suite 300
Chicago, Illinois 60606

Attention Ms. Christan L. Moffett, Clerk

Gentlemen:

Pursuant to Board Procedural Rule 406(a) we submit herewith
our Response to the Agency Recommendation.

Very truly yours,

A. R. Williams
Refinery Manager

Enclosures

cc: Mr. William Seltzer
Senior Technical Advisor
Division of Enforcement Services
Illinois Environmental Protection Agency
2200 Churchill Road
Springfield, Illinois 62706



BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:

SHELL OIL COMPANY

Petitioner

v.

ILLINOIS ENVIRONMENTAL
PROTECTION AGENCY

Respondent

PCB 79-166

PETITIONER'S RESPONSE TO AGENCY RECOMMENDATION

Shell Oil Company ("Petitioner") has reviewed the Agency's Variance Recommendation and now files this, its Response, pursuant to Board Procedural Rule 406(a).

On page 4 of its Recommendation the Agency recommended that the Petition be dismissed without prejudice, and Petitioner allowed an additional 45 days to correct stated deficiencies and supply requested information to the Agency to enable the Agency to make an appropriate evaluation. In particular the Agency requires:

- (a) Details of locations from which wastes are being hauled onsite and where onsite they are being hauled to, the quantities and a more precise description of such wastes.
- (b) Knowledge of whether any wastes are being disposed of on the Petitioner's property or elsewhere, and the locations of such disposal on or off the Petitioner's property.
- (c) Petitioner's estimate of costs of compliance with Rule 501 as opposed to costs of its own internal waste disposal permit system proposed on page 3, paragraph 5, of the Petition.

Petitioner responds as follows:

1. Petitioner points out that this Variance is for shipments of waste between the various parts of its refinery and not for shipments of waste for offsite disposal, as set forth in paragraph 4 on page 3 of the Petition.

2. Petitioner introduces Exhibit C, a summary of the wastes and other materials Shell transports over public roads between various parts of its Wood River Illinois Petroleum Refinery. The origin of each waste is described, the yearly quantity estimated, and the disposal or treatment site identified. Additionally the composition of each waste is provided.

Petitioner also introduces Exhibit D which is a map of the refinery property showing the location of the waste source and disposal or treatment sites referenced in Exhibit C.

The following comments are intended to provide additional detail for some items in Exhibit C:

(a) Slop oil is simply oil from drips and lines which has been collected at the docks to prevent it from getting into the Mississippi River. This oil is brought to the oil recovery system in main property where water is removed and returned to the refinery effluent treatment system, and the oil is returned to the refinery processes. There is no disposal.

(b) Weak sulfuric acid and caustic soda solutions are collected from a number of locations at the Mississippi River docks and the sulfur/acid facilities and removed to the main refinery property where neutralization occurs in a pond designated "neutralization pond". Disposal of sodium sulfate occurs.

(c) Sour water (that is, water containing sulfide and/or ammonia) from various sources, particularly crude oil tank water draws,

is transported to the main refinery property and discharged into API Separator Box No. 11 from which it flows to the refinery effluent treatment system.

(d) Crude oil tank bottoms are also removed to the oil recovery system described above.

(e) Sulfur Plant sour water is a much more concentrated sour water. This sour water is removed to the main refinery sulfide/ammonia recovery system. This process removes sulfur to the refinery sulfur recovery system leaving the ammonia in the water to be treated by the refinery effluent treatment system.

(f) Soda ash is used for neutralizing acid drips and spills at the Sulfuric Acid Plant. The material to be disposed of is sodium carbonate and sodium sulfate, and disposal is at an onsite landfill.

(g) Elemental solid sulfur is collected at the refinery Sulfur Plant as drips and spills and is also landfilled.

(h) Oily dirt, sand, and rock is collected from many places in the refinery following accidental spills or leaks. This material is hauled to the place designated "solid wastes" in the main refinery property. Disposal occurs.

3. None of the wastes at issue here are disposed of offsite. The wastes are either recovered and treated or disposed of onsite. The above references to the refinery effluent treatment system refer to equipment and discharge limitations, subject to NPDES Permit No. IL0000205 and Illinois EPA Water Pollution Control Permit No. 1979-E0-4328.

4. Petitioner's statement in Section 5 on page 3 of its Petition needs clarification. Petitioner's own internal waste disposal permit system is not a proposed system but an actual working system that has been in use in the refinery for many years and was recently upgraded to meet changing regulatory

requirements. Shell's system covers all kinds of waste and resource recovery movements in its refinery and is necessary to the efficient conduct of Shell's business. Moreover Shell's system is broader than the Agency's system since it covers all types of waste handling and resource recovery whereas the Agency's system deals only with "special waste". Since Shell's system is equivalent to and meets the intent of the Agency's system, the question is whether or not Petitioner must use the Agency manifest system in addition to its own system.

Petitioner estimates the cost of complying with Rule 501 at \$37,000 per year. The Rule 501 system would be a redundant system superimposed upon Shell's internal system at an additional cost of \$37,000 per year. This figure includes \$13,500 labor costs associated with filling out and handling manifests, \$12,000 training, \$10,000 staff time for consultations, and \$1,500 for mailing and stationery costs.

5. Petitioner reiterates its belief that having to comply with Rule 501 is an arbitrary and unreasonable hardship in the form of increased and inflationary administrative costs on it and the Agency. There is no evidence that this additional paper work burden will contribute anything to the protection of the environment.

Respectfully submitted,

SHELL OIL COMPANY

By:



A. R. Williams, Refinery Manager
P. O. Box 262
Wood River, Illinois 62095
(618) 254-7371

WASTES AND OTHER MATERIALS
TRANSPORTED OVER PUBLIC ROADS

<u>WASTE DESCRIPTION</u>	<u>ESTIMATED QUANTITY TONS/YR</u>	<u>ESTIMATED NUMBER OF LOADS/YR</u>	<u>DISPOSAL* SITE</u>	<u>COMMENTS</u>
1. <u>Slop Oil from River Float Sumps</u> -This is finished hydrocarbon product which is slopped during loading/unloading barges in order to drain lines and prevent discharges to the Mississippi River.	280	350	Oil Recovery System	This slop is generally more than 50% hydrocarbon with the remainder being water. The hydrocarbon will range from motor gasoline to heavy fuel oils.
2. <u>Weak Sulfuric Acid</u> -This is slop and line drainings from loading/unloading sulfuric acid barges.	45	15	Neutralization Pond - South	This slop is generally less than 10% H ₂ SO ₄ with trace amounts of hydrocarbon with the remainder being water.
3. <u>Weak Caustic</u> -This is slop and line drainings from loading/unloading caustic barges.	45	10	Neutralization Pond - North	This slop is generally less than 10% NaOH with trace amounts of hydrocarbon with the remainder being water.
4. <u>Sour Water from Water Draw Off Crude Tanks</u>	750	725	API Separator Box 11 (To Effluent Treater)	Typical Analysis is as follows: NH ₃ - 2 ppm Sulfide - less than 1 ppm
5. <u>Crude Tank Bottoms</u>	1,100	250	Oil Recovery System	A typical analysis is contained on page 3 of this Exhibit C.
6. <u>Sulfur Plant Sour Water</u>	300	35	Sulfide/NH ₃ Recovery and Effluent Treatment	Typical Analysis is as follows: NH ₃ - 10,500 ppm Sulfide - 12,800 ppm Diethanolamine (DEA) - 2.1%w

See Exhibit D

WASTES AND OTHER MATERIALS
TRANSPORTED OVER PUBLIC ROADS

<u>WASTE DESCRIPTION</u>	<u>ESTIMATED QUANTITY TONS/YR</u>	<u>ESTIMATED NUMBER OF LOADS/YR</u>	<u>DISPOSAL* SITE</u>	<u>COMMENTS</u>
. <u>Soda Ash (Bulk Na₂CO₃)</u> -Used for neutralizing acid in the Acid Plant.	50	10	Landfill	This is 100% soda ash.
. <u>Elemental Solid Sulfur</u>	20	10	Landfill	This is 100% solid elemental sulfur.
. <u>Oily Dirt/Sand/Rock</u> -These solids are a result of accidental spills or leaks in outlying refinery property.	75	20	Solid Waste	This is generally 10% hydro- carbon.

See Exhibit D

Sample Description Tank Bottoms A-75 Crude Lab No, 8

Part 1
Bulk Density: 92.7 g/100 ml.

Phase Portions	
Hydrocarbon Phase	<u>51.1</u>
Aqueous Phase	<u>30.1</u>
Solid Phase	<u>1.8</u>
Loss	<u>17.0</u>
	<u>100.0%</u>

Part 2

Parameter	CONSTITUENT CONCENTRATIONS	
	mg/kg of Phase	mg/kg of Total Sample
HYDROCARBON PHASE		
Benzo-a-pyrene		
Nickel	<u>5.7</u>	<u>2.9</u>
Vanadium	<u>28.7</u>	<u>14.6</u>
AQUEOUS PHASE		
Arsenic	<u>0.2</u>	<u>0.06</u>
Cadmium	<u>0.3</u>	<u>0.09</u>
Chromium (Total)	<u>LT 0.1</u>	<u>LT 0.03</u>
Chromium (Hexavalent)	<u>-</u>	<u>-</u>
Copper	<u>LT 0.1</u>	<u>LT 0.03</u>
Cyanide	<u>0.06</u>	<u>0.02</u>
Fluoride	<u>LT 1.1</u>	<u>LT 0.33</u>
Lead	<u>0.3</u>	<u>0.09</u>
Mercury	<u>LT 0.003</u>	<u>LT 0.0009</u>
Nickel	<u>0.3</u>	<u>0.09</u>
Selenium		
Vanadium	<u>LT 1.5</u>	<u>LT 0.45</u>
Zinc	<u>0.1</u>	<u>0.03</u>
SOLID PHASE		
Arsenic	<u>LT 7.4</u>	<u>LT 0.1</u>
Cadmium	<u>LT 14.8</u>	<u>LT 0.26</u>
Chromium	<u>44</u>	<u>0.8</u>
Copper	<u>143</u>	<u>2.7</u>
Lead	<u>266</u>	<u>4.8</u>
Mercury	<u>0.04</u>	<u>0.0008</u>
Nickel	<u>80</u>	<u>1.6</u>
Selenium		
Vanadium	<u>LT 222</u>	<u>LT 1</u>
Zinc	<u>562</u>	<u>10</u>
Total Sample		
Phenolics	LT = Less Than	<u>10.0</u>

APPENDIX - D

WAIVER DEMONSTRATION TECHNICAL INFORMATION FORM

APPENDIX D

WAIVER DEMONSTRATION TECHNICAL INFORMATION FORM

Company Name: Shell Oil Company; EPA ID.#: _____

Company Address: P. O. Box 262
Wood River, IL 62095

Inspector's Name: _____; Date: _____

1.0 Site Characterization

Regional Map (U.S.G.S., 7.5 min. Topographic Quadrangle Map, or similar) showing facility location with water supply wells near the facility indicated.

1.0.1 Are there discharging wells near the facility? (Y/N) Yes

If yes, give distances to wells 2.4 miles to Hartford municipal supply well.

1.0.1.1 Which aquifers in the vicinity provide water supplies? The unconfined surface aquifer.

1.0.1.2 What is the estimated withdrawal (diversion) rate from these aquifers? Varies - Shell Oil Co. withdraws an average 3,500 gpm in the vicinity of the surface impoundment.

1.0.2 Are there any streams, rivers, or lakes near the facility? (Y/N) Yes

1.0.2.1 If so, indicate approximate distances from the facility. 2.8 miles to the Mississippi River.

1.1 Regional Hydrogeologic/Surficial Geologic Map

1.1.1 Is the surficial geology adequately illustrated? (Y/N) Yes

1.1.2 Are areas of recharge/discharge shown? (Y/N) Yes

1.1.3 Is regional groundwater flow direction indicated? (Y/N) Yes

1.1.4 Are the water table or potentiometric contours logical? (Y/N) Yes

If yes, briefly explain methods

- 2.2 Have specially engineered features been incorporated into the facility design to minimize the migration of leachate?

(Y/N) Yes

If yes, briefly explain A cone of depression in the groundwater is maintained in the vicinity of the surface impoundment assuring that if any contaminant plume originated at the surface impoundment it

- 3.0 Water Balance would be intercepted.

- 3.1 Is precipitation data included?

(Y/N) No^{a/}

- 3.1.1 How is it tabulated? (check one)

- Daily _____
- Weekly _____
- Monthly _____
- Annually _____

- 3.1.2 Source of data (check one)

- U.S. Weather Service _____
- State Agency _____
- Other Source _____
Identify _____

- 3.1.3 Length of record, in years _____

- 3.1.4 Distance of measuring point from the facility _____

- 3.2 Is actual evapotranspiration (AET) data included?

(Y/N) No^{a/}

- 3.2.1 Is the source of AET data indicated?

(Y/N) _____

If yes, give reference _____

- 3.3 Is run-off calculated?

(Y/N) No^{a/}

- 3.3.1 Is the technique referenced?

(Y/N) _____

If yes, give reference _____

- 3.4 Is infiltration data included?

(Y/N) No^{a/}

- 3.4.1 Is source of data referenced?

(Y/N) _____

If yes, give reference _____

^{a/} These water balance factors are not applicable to the basis for the waiver and were, therefore, not evaluated as such for this demonstration.

3.5 Is there a positive net infiltration recorded? (Y/N) Not
Determined
If yes, how much? _____

4.0 Unsaturated Zone Characteristics

4.1 Has the applicant demonstrated that the unsaturated zone will isolate any waste derived leachate from the water table, chemically or physically? (Y/N) No

Briefly describe mechanism(s) The area is contained by maintenance of the cone of depression.

4.2 Physical Properties

4.2.1 Has the applicant defined the unsaturated thickness and areal variability? (Y/N) Yes

Briefly describe See well sample descriptions and data in report.

4.2.2 Has the primary and secondary porosity (if any) of the unsaturated zone been determined? (Y/N) Yes

Briefly describe Secondary porosity not applicable.

4.2.3 Have hydraulic conductivity curves for each sediment type comprising the unsaturated zone been established? (Y/N) Partial

4.2.4 Have textural analyses been performed? (Y/N) Yes

4.2.5 Have bulk densities been estimated? (Y/N) Yes

4.3 Chemical Properties

4.3.1 Has cation exchange been cited as an attenuation means? (Y/N) No

If yes,

4.3.1.1 Type of clay _____

4.3.1.2 Percent of clay _____

4.3.1.3 Percent of organics _____

4.3.1.4 pH of materials _____

4.3.2 Have other attenuation mechanisms, if any, been adequately explained?

(Y/N) No

If yes, cite mechanism:

4.3.2.1 Biodegradation _____

4.3.2.2 Complexation _____

4.3.2.3 Precipitation _____

4.3.2.4 Chelation _____

4.3.2.5 Other _____

5.0 Saturated Zone Physical Characteristics

5.1 Have the saturated zone hydrologic properties been determined?

(Y/N) Yes

If yes, were pumping tests performed to determine (check appropriate determinations and give results)

5.1.1 Transmissivity 210,000 (g/d/ft)

5.1.2 ~~Hydraulic Conductivity~~ Permeability 2,100 (g/d/ft)

5.1.3 Storage Coefficient 0.002

5.1.4 Leakage _____

5.2 How many tests were performed? 1

5.2.1 The duration(s) of test(s) 3 days

5.2.2 The length(s) of the recovery test(s) _____

5.3 Were other insitu tests performed?

(Y/N) No

(check appropriate tests)

5.3.1 Falling head tests _____

5.3.2 Constant head tests _____

5.3.3 Packer tests _____

5.3.4 Other _____

Explain _____

5.4 Was the saturated thickness determined?

(Y/N) Yes

- 5.5 Are static water level measurements included? (Y/N) Yes
- 5.6 Is a site water table (equipotential) contour map included? (Y/N) Yes
- 5.6.1 Does the contour map appear logical based on the presented data and topography? (Y/N) Yes
- 5.6.2 Are groundwater flowlines indicated? (Y/N) Yes
- 5.6.3 Are hydraulic gradients included? (Y/N) Yes
- 5.6.4 Are flow velocities included? (Y/N) No
- 5.7 Is there any indication of vertical flow in the saturated zone? (Y/N) No^{a/}
- 5.8 Saturated Zone Chemical Properties of Ground Water
- 5.8.1 Have water quality analyses been performed to establish background data? (Y/N) Yes
- 5.8.2 Does background information indicate that the aquifer may be degraded in any way? (Y/N) No
- 6.0 Computer Modeling
- 6.1 Was a computer simulation utilized in the demonstration? (Y/N) No
- Check appropriate model:
- 6.1.1 Mass transport _____
- 6.1.2 Flow model _____
- 6.2 Type of model? (check appropriate type)
- 6.2.1 Numerical _____
- 6.2.2 Analytic _____
- 6.2.3 Reference for model? _____

- 6.2.4 Does the data appear to warrant the use of modeling techniques? (Y/N) No
- If not, explain _____

^{a/} See waiver documentation for potentiometric vectors.

SHELL WOOD RIVER MANUFACTURING COMPLEX

JUNE 15, 1983

<u>Well No.</u>	<u>Elevation of Top Pipe</u>	<u>Elevation of Top Water</u>
T-1	444.25	396.75
T-2	443.73	395.81
T-3	451.65	389.65
T-4	448.65	393.06
T-5	444.08	393.33
T-6	447.37	397.45
T-7	444.70	396.29
T-8	430.26	405.04
T-9	429.04	405.12
T-10	433.31	399.72
T-11	431.01	399.68
T-12	445.37	395.37
T-13	444.16	396.75
T-14	445.31	390.06
T-15	445.74	395.41
T-16	444.65	396.65
T-17	446.60	386.85
T-18	446.30	399.80
T-19	446.44	383.11
T-20	447.68	398.35
T-21	444.63	405.47
T-22	442.88	402.65
T-23	430.41	401.00
T-24	444.40	395.15
T-25	446.75	392.75
T-26	446.87	394.12
T-27	444.44	384.11
T-28	444.67	396.59
T-29	446.99	394.74
T-30	446.93	394.60
T-31	445.05	397.46
T-32	430.83	406.08
T-33	441.66	400.66
T-34	446.03	402.20
T-35	446.08	405.58
T-36	444.98	407.81
T-37	447.81	396.89
T-38	446.26	398.76
T-39	441.77	403.69
T-40	432.31	403.31
T-41	430.09	406.84
T-42	433.11	409.11
T-43	436.42	407.10
T-44	437.63	407.45
T-45	438.91	409.24
T-46	428.91	402.41
T-47	429.77	404.10

SHELL WOOD RIVER MANUFACTURING COMPLEX

JUNE 15, 1963

<u>Well No.</u>	<u>Elevation of Top Pipe</u>	<u>Elevation of Top Water</u>
T-48	434.31	408.06
T-49	433.71	409.12
T-50	437.31	410.06
T-51	433.80	409.80
T-52	434.32	408.99
T-53	437.84	409.41
T-54	448.56	396.89
T-55	445.26	397.51
T-56	429.33	402.65
T-57	430.45	415.62
T-58	430.01	407.84
T-59	430.45	401.70
T-60	428.74	402.57
T-61	429.89	402.81
T-62	432.37	399.45
T-63	431.69	399.94
T-64	429.33	400.58
T-65	432.90	399.98
T-66	426.76	406.51
T-67	428.64	417.39
T-68	427.87	408.79
T-72	447.32	394.91
T-73	446.89	393.64
39	444.48	393.94
40	445.35	392.18
41	446.53	391.84
42	446.43	394.53
45	442.21	
47	445.14	393.22
52	444.11	394.90
55	438.04	396.04
56	446.41	392.10
57	445.22	392.72
58	443.23	391.53
59	445.10	402.00
60	445.60	401.00
62	445.23	390.43
64	446.37	391.20
65	446.37	391.70
66	446.45	390.78
67	447.10	391.24
68	451.67	406.67
69	447.11	392.19
70	447.29	391.79
71	445.09	394.09
72	447.19	392.69
73	446.89	391.39
74	444.53	391.97

SHELL WOOD RIVER MANUFACTURING COMPLEX

JUNE 15, 1983

<u>Well No.</u>	<u>Elevation of Top Pipe</u>	<u>Elevation of Top Water</u>
RW 2	416.95	403.00
RW 3	417.65	403.00
RW 5	418.30	403.00
RW 6	418.62	404.00
RW 7	420.08	405.00
Ranney	443.50	407.00
Tannery East	431.33	402.66
Tannery West	432.62	403.69
Kendall Hill	432.10	411.03
Roxana No. 1	446.45	396.37
Hartford #2	431.19	413.19
Anlin West	429.71	401.21

SHELL - WOOD RIVER MFG. COMPLEX
OCTOBER 1, 1982

<u>Well No.</u>	<u>Elevation of Top Pipe</u>	<u>Elevation of Top Water</u>
T-1	444.25	393.58
T-2	443.73	392.73
T-3	451.65	391.25
T-4	448.65	389.24
T-5	444.08	395.67
T-6	447.37	394.45
T-7	444.70	395.29
T-8	430.26	397.24
T-9	429.04	399.54
T-10	433.31	396.31
T-11	431.01	395.93
T-12	445.37	393.55
T-13	444.16	393.57
T-14	445.31	393.64
T-15	445.74	392.57
T-16	444.65	392.65
T-17	446.60	394.24
T-18	446.30	394.97
T-19	447.44	388.99
T-20	447.68	394.93
T-21	444.63	402.46
T-22	442.88	398.63
T-23	430.41	397.00
T-24	444.40	393.07
T-25	446.75	389.75
T-26	446.87	389.70
T-27	444.44	392.04
T-28	444.67	392.34
T-29	446.99	388.33
T-30	446.93	386.76
T-31	445.05	392.72
T-32	430.83	406.01
T-33	441.66	400.91
T-34	446.03	401.21
T-35	446.08	405.88
T-36	444.98	408.31
T-37	447.81	391.49
T-38	446.26	395.44
T-39	441.77	402.77
T-40	432.31	406.71
T-41	430.09	405.84
T-42	433.11	408.52
T-43	436.42	406.66
T-44	437.63	407.04
T-45	438.91	406.41
T-46	428.91	399.24
T-47	429.77	399.44
T-48	434.31	406.39
T-49	433.71	407.39
T-50	437.31	408.64

SHELL - WOOD RIVER MFG. COMPLEX

<u>Well No.</u>	<u>Elevation of Top Pipe</u>	<u>Elevation of Top Water</u>
T-51	433.80	409.05
T-52	434.32	409.07
T-53	437.84	409.01
T-54	448.56	396.23
T-55	445.26	395.44
39	444.48	391.58
40	445.35	390.24
41	446.53	391.16
42	446.43	391.43
45	442.21	390.38
47	445.14	390.00
52	444.55	387.60
55	438.04	393.73
56	446.41	391.91
57	445.22	390.98
58	443.23	391.78
59	445.10	397.51
60	445.60	398.35
62	445.23	390.53
64	446.37	389.94
65	446.37	390.58
66	446.45	391.00
67	447.10	389.43
68	451.67	403.92
69	447.11	390.66
70	447.29	389.96
71	445.09	393.09
RW2	416.95	395.00
RW3	417.65	395.00
RW5	418.30	395.00
RW6	418.62	395.60
RW7	420.08	396.50
RANNEY	443.50	398.00
Tannery - East	431.33	396.83
West	432.62	396.87
Kendall Hill	432.10	408.10
Roxana No. 1	446.45	395.12
Hartford No. 1	432.71	399.71
Anlin - East	429.74	394.41
West	429.71	394.54

SHELL WOOD RIVER MANUFACTURING COMPLEX
MAY 1, 1982

<u>WELL NUMBER</u>	<u>ELEVATION OF TOP PIPE</u>	<u>ELEVATION OF TOP WATER</u>
T-1	444.25	392.42
T-2	443.73	391.65
T-3	451.65	390.98
T-4	448.65	388.32
T-5	444.08	391.97
T-6	447.37	391.87
T-7	444.70	393.57
T-8	430.26	395.26
T-9	429.04	397.04
T-10	433.31	393.98
T-11	431.01	393.51
T-12	445.37	392.34
T-13	444.16	391.66
T-14	445.31	391.81
T-15	445.74	390.41
T-16	444.65	390.98
T-17	446.60	390.69
T-18	446.30	392.80
T-19	447.44	388.34
T-20	447.68	393.85
T-21	444.63	401.13
T-22	442.88	396.88
T-23	430.41	395.41
T-24	444.40	390.73
T-25	446.75	391.10
T-26	446.87	390.80
T-27	444.44	390.84
T-28	444.67	390.59
T-29	446.99	389.82
T-30	446.93	387.74
T-31	445.05	391.38
T-32	430.83	404.33
T-33	441.66	399.16
T-34	446.03	399.53
T-35	446.08	404.24
T-36	444.98	405.65
T-37	447.81	392.81
T-38	446.26	394.01
T-39	441.77	401.44
T-40	432.31	404.31
T-41	430.09	406.01
T-42	433.11	407.94
T-43	436.42	406.75
T-44	437.63	406.96
T-45	438.91	407.74

SHELL WOOD RIVER MANUFACTURING COMPLEX
MAY 1, 1982

2

<u>WELL NUMBER</u>	<u>ELEVATION OF TOP PIPE</u>	<u>ELEVATION OF TOP WATER</u>
T-46	428.91	398.91
T-47	429.77	400.60
T-48	434.31	404.72
T-49	433.71	405.79
T-50	433.31	406.81
T-51	433.80	407.80
T-52	434.32	407.49
T-53	437.84	407.09
T-54	448.56	394.89
T-55	445.26	394.34
39	444.48	400.00
40	445.35	380.00
41	446.53	391.00
42	446.43	389.00
45	442.21	388.38
47	445.14	394.00
52	444.55	387.10
55	438.04	391.21
56	446.41	390.08
57	445.22	398.20
58	443.23	391.03
59	445.10	397.00
60	445.60	393.00
62	445.23	390.00
64	446.37	388.66
65	446.37	391.00
66	446.45	389.00
67	447.10	390.00
68	451.67	404.00
69	447.11	390.77
70	447.29	391.29
71	445.09	391.00
RW-2	416.95	395.00
RW-3	417.65	396.00
RW-5	418.30	395.30
RW-6	418.62	395.60
RW-7	420.08	396.00
Ranney	443.50	395.00
Tannery East	431.33	394.83
Tannery West	432.62	393.96
Kendall Hill	432.10	407.27
Roxana No. 1	446.45	393.45
Hartford No. 1	432.71	402.71
Anlin East	429.74	391.73
Anlin West	429.71	392.21



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

RECEIVED

ISS
ILDO80012305 MEMORANDUM

TO: Division File MAY 21 1981 DATE: 4/2/81

FROM: Jeff Stern ILL. E.P.A. - D.L.P.C.
STATE OF ILLINOIS ☒ Information only

SUBJECT: Madison Co. Wood River/Shell Oil Co. 11911502 ☐ Response requested

This memo is being written as a follow-up to the ISS inspection conducted at this facility on March 4, 1981. It concerns the surface impoundment where hazardous wastes are currently being placed. The wastes being placed in the impoundment are DAF float (K048), Slop oil emulsion solids (K049), and API separator sludge (K051).

The process code on the Part A for these 3 wastes is D83- disposal in a surface impoundment. During the ISS inspection Jay Rankin, Shell Environmental department, informed us that this is only temporary storage until "Part B" comes out. At that time a decision would be made as to the ultimate disposal of the wastes and fate of the surface impoundment.

In the hazardous waste Interim Status Standards for surface impoundments, the owner or operator at closure is required to either remove all wastes, liner, contaminated soil from the impoundment or manage the impoundment as a landfill.

On or after May 19, 1981, when written closure plans are required, the closure plan at this facility will be inspected to see if any decision has been made regarding the surface impoundment. Also, at this time the ground water monitoring program will be reviewed.

km

DS ✓



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

ILD080012305
MEMORANDUM

TO: Division File MADISON Co. DATE: 3/18/81
FROM: Jeff Stern JS ☒ Information only
SUBJECT: Wood River / Shell Oil Co. 11911502 ☐ Response requested

This is a petroleum refining facility that generates and stores hazardous wastes. No hazardous waste has left the site since Nov. 19, 1980.

Inspection remarks as follows:

III-D: No specific provisions for hazardous waste management under RCRA, items addressed were taken from general plant operation procedures.

III-E-1: Each department has its own job titles.

III-E-3: Training does not need to be completed until 5/19/81. Mr. Rankin said training should be starting "next week".

RECEIVED

MAR 26 1981

ILL. E.P.A. - D.L.P.C.
STATE OF ILLINOIS